



SAFETY DATA SHEET

Eco-CRN™ Part A

Prepared to U.S. OSHA, Mexico NOM-018-STPS-2015, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

1.1 TRADE NAME (AS LABELED):

Eco-CRN™ Part A

SYNONYMS:

N/A

CAS#:

Mixture

PRODUCT #:

9020758

1.2 PRODUCT USE:

Activator part A for Epoxy primer floor coating

CHEMICAL SHIPPING NAME/CLASS:

See Section 14

U.N. NUMBER:

See Section 14

1.3 NORTH AMERICA:

Tennant Company

MANUFACTURER'S NAME:

701 North Lilac Drive, P.O. Box 1452, Minneapolis, MN 55440-1452
1-763-540-1200

ADDRESS:

BUSINESS PHONE:

1.4 EUROPE:

Tennant Benelux N.V.

MANUFACTURER'S NAME:

Roderveldaan 3, 2600 Antwerpen, Belgium
+32-3-2179411

ADDRESS:

BUSINESS PHONE:

800-424-9300 (Chemtrec U.S. – 24 Hrs)
1-703-537-3887 (Chemtrec Europe – 24 Hrs)

EMERGENCY PHONE:

info@tennantco.com

EMAIL:

DATE OF CURRENT REVISION:

November 20, 2019

DATE OF LAST REVISION:

New

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a clear liquid with no odor.

Health Hazards: May be harmful if swallowed or inhaled. Exposure may cause skin and eye irritation. May cause allergic reaction of the skin.

Flammability Hazards: This product is a nonflammable liquid with a flash point of >200°F (>93°C).

Reactivity Hazards: None known

Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this product may have significant adverse effects in the aquatic environment.

US DOT SYMBOLS

CANADA (WHMIS) SYMBOLS

EUROPEAN and (GHS) Hazard Symbols

See Section 14

Complies with WHMIS 2015



Signal Word: **Warning!**

2.1 GHS LABELING AND CLASSIFICATION:

This product does meet the definition of a hazardous substance or preparation as defined by: OSHA HCS 2012 (29 CFR 1910. 1200) AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC, 2015/830/EU and subsequent Directives AND Mexico NOM-018-STPS-2015.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number:

EC# 202-859-9 Annex VI Index# 603-057-00-5

EC# 608-164-0 is not listed in Annex VI

EC# 216-823-5 Annex VI Index# 603-073-00-2

EC# 241-536-7 Annex VI Index# 603-094-00-7

Substances not listed either individually or in group entries must be self-classified.

Component(s) Contributing to Classification(s)

Benzyl Alcohol, Epoxy Novolac, Epoxy Resin, Neopentyl Glycol Diglycidyl



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2.2 LABEL ELEMENTS:

GHS Hazard Classification(s):

Acute Toxicity Category 4 (Oral)
Acute Toxicity Category 4 (Inhalation)
Skin Irritation Category 2
Eye Irritation Category 2A
Skin Sensitizer Category 1
Aquatic Chronic Category 2

Hazard Statement(s):

H302: Harmful if swallowed
H332: Harmful if inhaled
H315: Causes skin irritation
H319: Causes serious eye irritation
H317: May cause allergic skin reaction
H411: Toxic to aquatic life with long lasting effects

Prevention Statement(s):

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing/eye protection/face protection.

Response Statements:

P301+P312: IF SWALLOWED: Call a POISON CENTER/Doctor if you feel unwell.
P330: Rinse mouth.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON/Doctor if you feel unwell.
P302+P352: IF ON SKIN: Wash with plenty of water.
P321: Specific treatment (See Section 4 of this SDS).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P391: Collect spillage.

Storage Statements:

None applicable

Disposal Statements:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin and eyes. The symptoms of overexposure are described below.

ACUTE:

INHALATION: May be harmful if inhaled. May cause respiratory irritation.

CONTACT WITH SKIN: May cause skin irritation. May cause skin sensitization.

EYE CONTACT: May cause serious eye irritation.

INGESTION: May be harmful if swallowed. May cause nausea or vomiting if swallowed.

CHRONIC: No specific data available.

TARGET ORGANS: Acute: Skin and Eyes **Chronic:** No data available



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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification
Benzyl Alcohol	20-50%	100-51-6	202-859-9	H302: Acute Toxicity Cat 4 (Oral), H332: Acute Toxicity Cat 4 (Inhalation)
Epoxy Novolac	20-50%	28064-14-4	608-164-0	H319: Eye Irritant Cat 2, H315: Skin Irritant Cat 2, H317: Skin Sensitizer Cat 1, H411: Aquatic Chronic Cat 2
Epoxy Resin	5-20%	1675-54-3	216-823-5	H319: Eye Irritant Cat 2, H315: Skin Irritant Cat 2, H317: Skin Sensitizer Cat 1, H411: Aquatic Chronic Cat 2
Neopentyl Glycol Diglycidyl	5-20%	17557-23-2	241-536-7	H315: Skin Irritant Cat 2, H317: Skin Sensitizer Cat 1
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers). Exact concentrations withheld as trade secret.				

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.

SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Some individuals may develop skin or respiratory sensitization from exposure.

4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Skin and eye irritation. May cause an allergic skin reaction.

4.3 RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray: Yes Carbon Dioxide: Yes
Foam: Yes Dry Chemical: Yes
Halon: Yes Other: Any "C" Class

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

Explosion Sensitivity to Mechanical Impact: No
Explosion Sensitivity to Static Discharge: No

5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

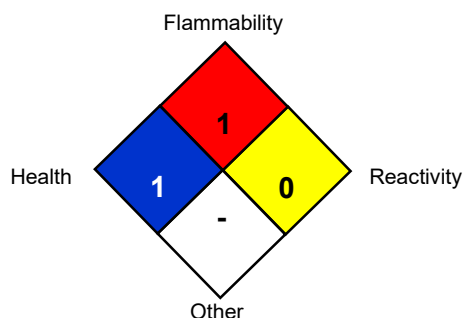
Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.



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NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD (BLUE)	1		
FLAMMABILITY HAZARD (RED)	1		
PHYSICAL HAZARD (YELLOW)	0		
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

See section 8.2 for Exposure Controls.

6.2 ENVIRONMENTAL PRECAUTIONS:

Precautions should be taken to prevent exposure to the environment.

6.3 SPILL AND LEAK RESPONSE: Stop the flow of material, if this can be done safely. Floor may be slippery; use care to avoid falling. Dike and contain the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate, transfer the liquid and solid dike material to containers for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Use good hygiene practices. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Use good hygiene practices.

7.2 STORAGE AND HANDLING PRACTICES:

Store in original container. Keep container closed. Store in a cool, dry location. Avoid exposure to ignition sources and incompatible materials. Store inside in a cool (below 100°F or 37.5°C), dry place.

7.3 SPECIFIC USES:

See section 1.2 for details.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Benzyl Alcohol	100-51-6	1.230 mg/kg	2.000 mg/kg
Epoxy Novolac	28064-14-4	Not established	Not established
Epoxy Resin	1675-54-3	Not established	Not established
Neopentyl Glycol Diglycidyl	17557-23-2	Not established	Not established



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8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical splash goggles are recommended to avoid contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves are recommended to prevent contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use as appropriate to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is a clear liquid.

ODOR: Not Available

ODOR THRESHOLD: Not Available

pH: Not Applicable

MELTING/FREEZING POINT: Not Available

BOILING POINT: 401-473°F (205-245°C)

FLASH POINT: >200°F (93.3°C)

AUTOIGNITION TEMPERATURE: Not Available

EVAPORATION RATE (n-BuAc=1): n-Butyl Acetate

FLAMMABILITY (SOLID, GAS): Not Applicable

UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available

VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available

VAPOR DENSITY: Heavier than air

RELATIVE DENSITY: 1.15

DENSITY: Not Available

SPECIFIC GRAVITY: Not Available

SOLUBILITY IN WATER: Insoluble

WEIGHT PER GALLON: Not Available

PARTITION COEFFICIENT (n-octanol/water): Not Available

AUTO-IGNITION TEMPERATURE: Not Available

DECOMPOSITION TEMPERATURE: Not Available

VISCOSITY: Not Available

VOC g/l / Lb/gal: Not Available

9.2 OTHER INFORMATION:

No additional information available

10. STABILITY and REACTIVITY

10.1 REACTIVITY: This product is not reactive.

10.2 STABILITY: Stable under conditions of normal storage and use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur under normal conditions.

10.4 CONDITIONS TO AVOID: See Incompatible materials.



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10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This product may react with oxidizing agents and strong alkalis.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion for products like this may generate highly poisonous carbon dioxide, carbon monoxide, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA:

Epoxy Resin CAS# 1675-54-3

Oral LD50, Rat, 11400 mg/kg

Oral LD50, Rabbit, >2000 mg/kg

Dermal LD50, Rat, 11400 mg/kg

Dermal LD50, Rabbit, >2000 mg/kg

Neopentyl Glycol Diglycidyl CAS# 17557-23-2

Oral LD50, >2150 mg/kg

Dermal LD50, >2150 mg/kg

Benzyl Alcohol CAS# 100-51-6

Oral LD50, Mouse, 1360 mg/kg

Dermal LD50, Rabbit, 2000 mg/kg

Inhalation LC50, Rat, 1000 ppm (8H)

Epoxy Novolac CAS# 28064-14-4

Oral LD50, >5000 mg/kg

SUSPECTED CANCER AGENT: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin, eyes or respiratory system

SENSITIZATION TO THE PRODUCT: This product is considered to be a skin sensitizer

REPRODUCTIVE TOXICITY INFORMATION: This product does contain chemicals suspected to be hazardous to the human reproductive system.

MUTAGENICITY INFORMATION: This product does not contain a component that is suspected to be a mutagenicity hazard.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Data not sufficient for classification.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Data not sufficient for classification.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

No specific data available on this product.

12.2 PERSISTENCE AND DEGRADABILITY:

No specific data available on this product.

12.3 BIOACCUMULATIVE POTENTIAL:

No specific data available on this product.

12.4 MOBILITY IN SOIL:

No specific data available on this product.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

12.6 OTHER ADVERSE EFFECTS:

This product may cause harm to plants, animals or aquatic life.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.7 WATER ENDANGERMENT CLASS:

Not water endangering in accordance with EU Guideline 91/155-EWG.

12.8 SPECIFIC AVAILABLE COMPONENT INFORMATION:

No additional data available.



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13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU Waste Code:

Not determined.

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

BULK SHIPMENTS WITHIN U.S.:

14.1 PROPER SHIPPING NAME: Not Regulated

14.2 HAZARD CLASS NUMBER and DESCRIPTION: N/A

14.3 UN IDENTIFICATION NUMBER: N/A

14.4 PACKING GROUP: N/A

14.5 DOT LABEL(S) REQUIRED: N/A

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: N/A

RQ QUANTITY: NA

14.6 MARINE POLLUTANT: None of the components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.7 SPECIAL PRECAUTIONS FOR USER: None

14.8 INTERNATIONAL TRANSPORTATION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is considered as dangerous goods.

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, N.O.S (Epoxy Resin and Novolac)

HAZARD CLASS NUMBER and DESCRIPTION: 9, Environmentally Hazardous Substance

UN IDENTIFICATION NUMBER: UN3082

PACKING GROUP: III

DOT LABEL(S) REQUIRED: Environmentally Hazardous Substance

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is considered as dangerous goods.

14.9 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

15.1 UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.



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15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for full Details

15.4 AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

15.6 MEXICO REGULATIONS:

HARMONIZED SYSTEM FOR THE IDENTIFICATION AND COMMUNICATION OF HAZARD AND RISKS FROM

HAZARDOUS CHEMICALS IN THE WORKPLACE: This product has been classified per NOM-018-STPS-2015.

15.7 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftlist List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Chris Eigbrett – **(MSDS to GHS Compliance)**

DATE OF PRINTING: November 20, 2019

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Tennant Company assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Tennant Company assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

END OF SDS SHEET